DOCUMENT RESUME

ED 189 579 CS 005 563

AUTHOR Coughlan. Georgiana F.
TITLE Spelling: Rules versus Learning Strategies.
PUB DATE Mar 80
NOTE 11p.: Paper presented at the Annual Meeting of the Western College Reading Association (13th, San Francisco, CA, March 27-30, 1980).

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS *Educational Research: Higher Education: Instructional Materials: *Morphemes: *Phoneme Grapheme Correspondence: Program Descriptions: *Spelling: *Spelling Instruction: Teaching Methods: Word Study Skills

ABSTRACT

A twelve-hour spelling class was held over one weekend at California State University, Dominguez Hills. During this course, students were helped to discover their own spelling difficulties and were introduced to a wide variety of materials and strategies, including spelling nonsense words, effective dictionary use, vocabulary building, the study of word families, the study of pronunciation-related errors, and the use of memory aids. Emphasis was placed on the fact that English spelling is both phonemic and morphemic. Results of the analysis of spelling done by the class members indicated that they relied on visual analogy with words they knew rather than on rules. (MKM)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED189579

U S DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

S P E L L I N G:

RULES VERSUS LEARNING STRATEGIES

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

Georgiana F. Coughlan

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

By: Georgiana F. Coughlan
Humanities Department
El Camino College
16007 Crenshaw Boulevard
Via Torrance, California 90506

CS205563

A B S T R A C T

Spelling Strategies Differ From Reading Strategies

English spelling depends upon both sound-letter correspondences and morphological conditioning. Because of this, strategies which work well in reading do not work well in spelling, as is suggested by the phenomenon of students who read well but spell poorly.

Spelling of Nonsense Words Approximates English Patterns

Students in a twelve-hour intensive spelling course given at California State University, Dominguez Hills, were given some nonsense words to spell. Their performance suggested that even the weaker spellers had developed strategies which made for partial spelling success, although the students were unable to explain these strategies in terms of rules. A student's approach to the nonsense words, together with his performance on a more traditional spelling diagnostic test, proved useful in determining that particular student's spelling behavior. Group work with nonsense words greatly stimulated student curiosity about spelling.

Strategies for Spelling Improvement

The teaching of spelling strategies is probably more useful than is the teaching of detailed spelling rules. Students at Dominguez Hills were helped to discover their own spelling difficulties and were then introduced to a wide variety of materials and strategies. These included such approaches as effective dictionary use, vocabulary building, the study of word families, the study of pronunciation-related errors, and the use of aids to memory, both visual and oral.

English Spelling is both Phonemic and Morphemic

Much of the available literature has demonstrated that English spelling depends on both sound-letter correspondences and morphological conditioning. In one and two syllable single morpheme words, particularly with regard to consonant and short vowel sounds, phoneme-grapheme correspondences will usually account for the spelling of English words. Homophones frequently result, however, from the variant spellings of long vowels, e.g., "pail", "pale". Spelling is conditioned by morphological considerations. Moreover, reduced vowels are not spelled phonemically. Consider the pairs "human" and "humanity", "democrat" and "democracy", "atom" and "atomic". In the first word of each pair the unstressed vowels "a", "o" and "o" are pronounced alike as /ə/. In the second word of each pair the same vowels are stressed and receive the pronunciations /æ/, /ɔ/, and /ɔ/ respectively. In both cases, a knowledge of the second word provided a clue to the spelling of the first. Furthermore, as Chomsky and Halle have shown (3), the language is filled with alternating pairs such as "serene" and "serenity", "divine" and "divinity", "sane" and "sanity" in which vowels with quite different pronunciations are spelled the same, visually preserving a common root morpheme. Non-phonemic spellings also frequently result from the juncture of prefix and base. Consider "misstate", "dissolve", and "outtalk". Phonetic assimilation may further complicate the picture as in "ad" + "cept" = "accept" and "ex" + "centric" = "eccentric".

Reading and Spelling Are Different Skills

Because English spelling is not phonemic throughout, reading and spelling involve different strategies. For example, given the sentence to read, "When the truck hit the fire hydrant, there was an exade of water", the student can use a substitution strategy to puzzle out the meaning of the unfamiliar word "exade". His decoding job is fairly simple, as well, inasmuch as the sequence "ex" can only have the sound /ɛks/, and the sequence "ade" can only yield the long /e/ sound. Conversely, however, the process is not so simple. Encoding is less predictable. Given the unfamiliar sound sequence /ɛksəneʃən/ ("exanation"), there are several possibilities. The /ks/ sound can be written variously as "x" as in "extra" or "cks" as in "trickster". The unstressed vowels can occur as any vowel letter. The student must apply his knowledge of English morphology, predicting that the /ʃən/ ending indicates a "tion" noun suffix. If "exanation" were a real English word, the student might be able to predict the right letter for the second vowel sound by looking at a related word, perhaps something like "exane". Students in a twelve-hour, one-weekend spelling class given in the summer of 1979 at California State University, Dominguez Hills, were given "exanation" to spell. They most frequently "misspelled" it as "exination", failing to guess the unstressed vowel. Unpublished work by Uta Frith (10) notes the problem of students who read well, but spell poorly and suggests that such students have not learned strategies which enable them to make effective use of morphological information when they spell. Teachers are certainly familiar with errors such as "acurate" and "convenience". Some errors also result from failure to recognize the correct morphology of a word ("perhaps"). Other errors result from faulty pronunciation ("canidate") or because the word

belongs to a group of words which violate a general rule. Usually, when two morphemes are joined, no letters are lost, but a silent final "e" is normally dropped before a suffix beginning with a vowel. Errors such as "loseing" are frequent.

Spelling of Nonsense Words Approximates English Patterns

Students in a twelve-hour, one-weekend spelling class given in the summer of 1979 at California State University, Dominguez Hills, were given a number of nonsense words to spell. The students produced fairly consistent phonemic spellings when the words had a single syllable with a short vowel sound: /zɪt/ became "zit", /zɛt/ became "zet", /zæt/ became "zat", and /zʌt/ became "zut". Long vowels and the vowel /ɔ/ were written in a variety of ways, on analogy with renderings which actually occur in English. For example:

/zɔt/ became "zot", "zought", and "zaught"

/zit/ became "zeat", "zeet", and "ziet"

/zet/ became "zate", "zeit", "zaight", "zait", and "ziet"

/zut/ became "zoot", "zute", and "zuit"

/zot/ became "zote" and "zoat"

Students were also asked to spell nonsense words which resembled English words with two or more morphemes. For example, given the mythical verb /zet/ spelled "zate", students rendered the past tense as "zated" most of the time; however, given the verb /zæt/ spelled "zat", the students generally wrote the past tense as "zatted". Students were unable to account for their behavior in terms of rules, however. The consonant doubling rule across morpheme boundaries is fairly complicated, consisting of four parts:

1. The base must end in a single final consonant. 2. That final consonant must be preceded by a single vowel. 3. The suffix added must begin with a vowel. 4. The last syllable of the base must be stressed in the derived word.

Students tended to spell nonsense words on analogy with the patterns of real words given previously in the same word list, even when the real words were exceptions to very productive rules, such as the consonant doubling rule. For example, having been given the words "crystal" and "crystallize", many students spelled the nonsense words /trɪstəl/ and /trɪstəlayz/ as "trystal" and "trystallize", despite the fact that "crystallize" violates the consonant doubling rule because the last syllable of the base is not stressed in the derived word. No student spelled /lutæv/ as "lutav", instead producing "lutaff", "lutaf", or even "lutave". They seemed to know that final "v" never occurs in English spelling. However, when given the words "race" and "racial", followed later in the list by the nonsense pair /tes/ and /teʃəl/, few of the students produced "tace" and "tacial". They were also given the nonsense pair /libəl/ and /libæləti/ for which the analogue was "legal" and "legality", although the latter pair was not given in the word list. Most students spelled /libəl/ as "leable" or "leeble" and failed to see any connection with /libæləti/. Relatively few students perceived /mɪsprəd/ as two morphemes and so failed to produce a double "s". The behavior of one group of students on one short list is certainly not sufficient to establish valid conclusions; however, the implication seems to be that some constraints on English spelling are more powerful than others, and that, furthermore, spellers sometimes rely on visual analogy with words they know rather than on "rules". More research with nonsense words would

probably reveal some interesting facts about the ways in which students tackle spelling. The students at Dominguez Hills very much enjoyed working with the nonsense words, and the exercise stimulated considerable curiosity about spelling.

Below is the word list the students were given. The list was repeated twice, and students were told that they could change spellings the second time around if they wanted to. All words are given as "correctly" spelled; nonsense words are followed by a phonemic version.

race	lebality / libæləti/	sprode / sprod/
prefer	preferred	missprode / mɪsprod/
racial	preference	trystallize / trɪstəlayz/
crystal	lutav / lutæv/	trat / træt/
tace / tes/	lutavved / lutævd/	tratment / trætmənt/
tacial / teʃəl/	trystal / trɪstəl/	tratting / trætɪŋ/
lebal / libəl/	crystallize	exanation /ɛksənešən/

In addition to the nonsense words students were given the diagnostic test from Brown and Pearsall's Better Spelling (1), which breaks down spelling problems into fourteen areas as follows:

1. Words with "ie" and "ei"
2. Final "y"
3. Final consonant rule
4. Vowel length
5. Pronunciation problems
6. Unstressed vowels
7. Homophones
8. Prefixes and suffixes
9. Final "e"
10. Assimilative changes
11. Plurals
12. Hyphens
13. Apostrophes
14. Demons

Although Brown and Pearsall do teach the rule for consonant doubling, the rule for final "y" and the rule for final "e", their approach also suggests that the teaching of spelling strategies is probably more useful than is the teaching of detailed spelling rules.

The students at Dominguez Hills were encouraged to consider a variety of strategies to attack their individual spelling weaknesses. The first of these strategies was effective use of the dictionary. Some students spell so badly that they have a difficult time finding words in the dictionary. For such students it is useful to compile a list of helpful hints. For example, if a word sounds as if it begins with an "s" but cannot be found, students might try looking for it under "psy" as in "psychology" or under "c" as in "cycle". For this reason a vocabulary building approach which groups words in a spelling subpattern together may be helpful. Students may also profit from using a small and easily carried spelling dictionary, such as Gallagher and Colvin's Words Most Often Misspelled and Mispronounced (12). Some students may be helped by a few of the relatively simple and highly productive rules, for instance the rule governing the plural of nouns ending in "y". Rules such as the consonant doubling rule, while very productive, probably have little use as practical spelling aids, both because of their complexity and because of their difficulty of application. Most students do not have a clear notion of stress patterns, a knowledge of which is necessary to apply this rule. Drill on lists of demons and particularly on lists of commonly confused homophones and near homophones, such as "past" and "passed", "advice" and "advise" are helpful. Such lists are available in Brown and Pearsall as well as in many other standard teaching materials.

Other spelling improvement strategies were suggested and demonstrated to the students. These included vocabulary building, the study of roots, prefixes and suffixes, and the study of word families. Students were particularly encouraged to look for related words when they were puzzled over the spelling of unstressed vowels. A number of inexpensive vocabulary builders are available. Ida Ehrlich's Instant Vocabulary (8) uses a word family approach; Funk and Lewis' 30 Days to a More Powerful Vocabulary groups words according to subject matter. Another inexpensive paperbacked spelling aid is Harry Shefter's 6 Minutes a Day to Perfect Spelling. Shefter suggests a mnemonic device in which students take their own personal spelling demons and make up sentences in which the difficult part of the word is the basis for a visual associational bond. For example, if the second syllable of "privilege" is a problem, the student makes up and writes down a sentence such as, "It is VILE to allow special priVILEge."

During the weekend the Dominguez Hills students also practiced learning personal demons by means of visual flashcards and by means of oral activities such as repetition and small group spelling "bees". Throughout the twelve-hour course, the objective was to enable the students to discover their own particular spelling behavior and then to chose those strategies which they thought would enable them to work on personal spelling deficiencies long after the course was over.

REFERENCES

1. Brown, J., & Pearsall, T. Better Spelling. 2nd Edition, Lexington, Mass.: Heath & Co., 1978

2. Chomsky, N. & Halle, M. The Sound Patterns of English. New York: Harper & Row, 1968

3. Chomsky, C. Reading, Writing and Phonology. Harvard Educational Review, 1970, 40, 287-309

4. Cronnell, B. Designing Phonics for Reading. The Reading Teacher, 1978, 32, 337-340

5. Cronnell, B. Designing A Reading Program Based on Research Findings in Orthography. Elementary English, January 1973, 27-34

6. Desberg, P. Substitution Strategies in Reading and Spelling. Unpublished article, California State University, Dominguez Hills, 1978

7. Desberg, P. & Marsh, G. & Moeton, F. & Welch, V. The Development of Strategies in Spelling. Unpublished article, California State University, Dominguez Hills, 1978

8. Ehrlich, I. Instant Vocabulary, New York, New York: Pocket Books, 1969

9. Feinstein, G. Programmed Spelling Demons. Englewood Cliffs, New Jersey: Prentice-Hall, 1973

10. Frith, U. Unpublished lecture. California State University, Dominguez Hills, 1979

11. Funk, W. & Lewis, N. 30 Days to a More Powerful Vocabulary. New York: Pocket Books, 1971

12. Gallagher, R. & Colvin, J. Words Most Often Misspelled and Mispronounced. New York: Pocket Books, 1963

13. Gould, S. Spelling Isn't Reading Backwards. Journal of Reading, 1976, 20, 220-225

14. Russell, P. Morphology and English Spelling. Southwest Regional Laboratory Technical Note, November, 1972

15. Russell, P. An Outline of English Spelling. Southwest Regional Laboratory Professional Paper 55, 1975

16. Shefter, H. 6 Minutes a Day to Perfect Spelling. New York: Pocket Books, 1976